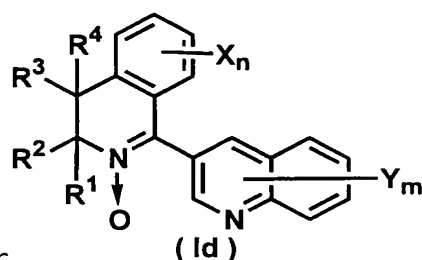
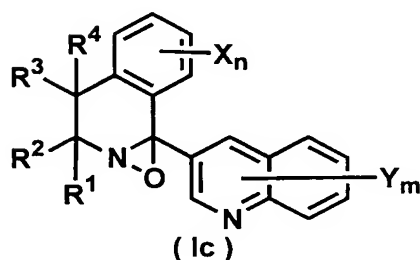
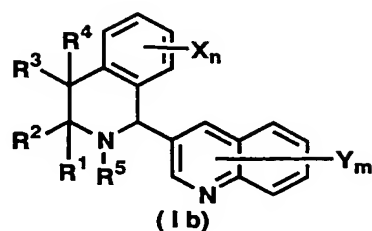
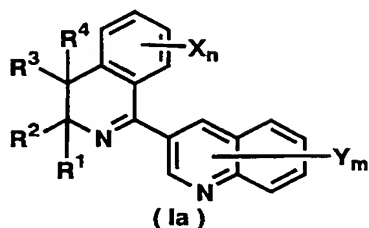


# CLAIMS

1. A compound, or salt thereof, represented by general formula (Ia), (Ib), (Ic) or (Id):



, or

(wherein,

R<sup>1</sup> and R<sup>2</sup> may be the same or different, and represent

10 a C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkoxy group, C<sub>1</sub>-C<sub>6</sub> alkylthio group and phenoxy group;

15 an aryl group which may be substituted with 1 to 6 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 same or different halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkoxy group, amino group which may be substituted with 1 to 2 same or different C<sub>1</sub>-C<sub>6</sub> alkyl groups or acyl groups, nitro group, cyano group, hydroxyl group mercapto group, and C<sub>1</sub>-C<sub>6</sub> alkylthio group;

20 a heteroaryl group which may be substituted with 1 to 6 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 same or different halogen atoms, and C<sub>1</sub>-C<sub>6</sub> alkoxy group;

an aralkyl group which may be substituted with 1 to 6 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 same or different halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkoxy group, amino group which may be substituted with 1 to 2 same or different C<sub>1</sub>-C<sub>6</sub> alkyl groups or acyl groups, nitro group, cyano group, hydroxyl group, mercapto group and C<sub>1</sub>-C<sub>6</sub> alkylthio group; or

R<sup>1</sup> and R<sup>2</sup> together represent a C<sub>3</sub>-C<sub>10</sub> cycloalkyl group, which may be substituted with 1 to 3 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl group, C<sub>1</sub>-C<sub>6</sub> alkoxy group and phenoxy group;

R<sup>3</sup> and R<sup>4</sup> may be the same or different, and represent

a hydrogen atom;

a C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkoxy group, C<sub>1</sub>-C<sub>6</sub> alkylthio group and phenoxy group;

a halogen atom;

a C<sub>1</sub>-C<sub>6</sub> alkylene group;

a C<sub>1</sub>-C<sub>6</sub> alkoxy group;

a hydroxyl group;

a keto group; or,

R<sup>3</sup> and R<sup>4</sup> together represent a C<sub>3</sub>-C<sub>10</sub> cycloalkyl group which may be substituted with 1 to 3 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl group, C<sub>1</sub>-C<sub>6</sub> alkoxy group and phenoxy group;

R<sup>5</sup> represents

a hydrogen atom, acyl group; or

a C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-

C<sub>6</sub> alkoxy group, C<sub>1</sub>-C<sub>6</sub> alkylthio group and phenoxy group;

X represents a halogen atom;

5 a C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkoxy group, hydroxyl group, C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group and phenoxy group;

10 a C<sub>2</sub>-C<sub>6</sub> alkenyl group which may be substituted with 1 to 3 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkoxy group, C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group and phenoxy group;

15 a C<sub>2</sub>-C<sub>6</sub> alkynyl group which may be substituted with 1 to 3 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkoxy group and phenoxy group;

20 an aryl group which may be substituted with 1 to 6 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 same or different halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkoxy group, amino group which may be substituted with 1 to 2 same or different C<sub>1</sub>-C<sub>6</sub> alkyl groups or acyl groups, nitro group, cyano group, hydroxyl group, mercapto group and C<sub>1</sub>-C<sub>6</sub> alkylthio group;

25 a heteroaryl group which may be substituted with 1 to 6 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 same or different halogen atoms, and C<sub>1</sub>-C<sub>6</sub> alkoxy group;

30 a C<sub>1</sub>-C<sub>6</sub> alkoxy group;

an amino group which may be substituted with 1 to 2 C<sub>1</sub>-C<sub>6</sub> alkyl groups or acyl groups, which may be the same or different;

an acyl group;

35 a cyano group; or

an N-hydroxyalkaneimido group in which a hydrogen

atom of the hydroxyl group may be substituted with a substituent selected from the group consisting of a C<sub>1</sub>-C<sub>6</sub> alkyl group, C<sub>2</sub>-C<sub>6</sub> alkenyl group, C<sub>2</sub>-C<sub>6</sub> alkynyl group, aralkyl group, aryl group and heteroaryl group;

5           Y represents a substituent selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl group, C<sub>1</sub>-C<sub>6</sub> alkoxy group and hydroxyl group;

          n represents an integer of 0 to 4; and,

          m represents an integer of 0 to 6).

10

2.       The compound or salt thereof according to claim 1 wherein R<sup>1</sup> and R<sup>2</sup> represent a C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 substituents, which may be the same or different, selected from the group consisting of a  
15       halogen atom, C<sub>1</sub>-C<sub>6</sub> alkoxy group, and phenoxy group, or an aryl group which may be substituted with 1 to 6 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl group, C<sub>1</sub>-C<sub>6</sub> alkoxy group and hydroxyl group.

20

3.       The compound or salt thereof according to claim 1 or 2 wherein R<sup>1</sup> and R<sup>2</sup> represent a C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 substituents, which may be the same or different, or a phenyl group which may be  
25       substituted with 1 to 6 halogen atoms, which may be the same or different.

4.       The compound or salt thereof according to any of claims 1 to 3 wherein R<sup>1</sup> and R<sup>2</sup> represent a methyl group,  
30       ethyl group, propyl group, trifluoromethyl group, trifluoroethyl group, phenyl group, fluorophenyl group or chlorophenyl group.

5.       The compound or salt thereof according to any of  
35       claims 1 to 4 wherein R<sup>3</sup> and R<sub>4</sub> represent a hydrogen atom, halogen atom or C<sub>1</sub>-C<sub>6</sub> alkyl group.

6. The compound or salt thereof according to any of claims 1 to 5 wherein X represents a halogen atom; a C<sub>1</sub>-C<sub>6</sub> alkyl group; a C<sub>1</sub>-C<sub>6</sub> alkynyl group; an aryl group which may be substituted with 1 to 6 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 same or different halogen atoms, and a C<sub>1</sub>-C<sub>6</sub> alkoxy group; a heteroaryl group which may be substituted with 1 to 6 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 same or different halogen atoms, and C<sub>1</sub>-C<sub>6</sub> alkoxy group; a cyano group; or, an N-hydroxyalkaneimidoyl group in which a hydrogen atom of the hydroxyl group may be substituted with a substituent selected from the group consisting of a C<sub>1</sub>-C<sub>6</sub> alkyl group and a phenyl group, and n represents an integer of 0 to 2.
7. The compound or salt thereof according to any of claims 1 to 6 wherein X represents a halogen atom; a C<sub>1</sub>-C<sub>6</sub> alkyl group; a C<sub>1</sub>-C<sub>6</sub> alkynyl group; a heteroaryl group which may be substituted with 1 to 6 substituents, which may be the same or different, selected from the group consisting of a halogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl group which may be substituted with 1 to 3 same or different halogen atoms, and C<sub>1</sub>-C<sub>6</sub> alkoxy group; a cyano group; or, an N-hydroxyalkaneimidoyl group in which a hydrogen atom of the hydroxyl group may be substituted with a substituent selected from the group consisting of a C<sub>1</sub>-C<sub>6</sub> alkyl group and a phenyl group, and n represents an integer of 0 to 2.
8. The compound or salt thereof according to any of claims 1 to 7 wherein X represents a fluorine atom, chlorine atom, bromine atom, methyl group, ethynyl group, furyl group, thienyl group, cyano group,

methoxyethaneimidoyl group, ethoxyethaneimidoyl group or phenoxyethaneimidoyl group, and n represents an integer of 0 or 1.

5 9. The compound or salt thereof according to any of claims 1 to 8 wherein Y represents a fluorine atom, chlorine atom or methyl group, and m represents an integer of 0 or 1.

10 10. The compound of salt thereof according to any of claims 1 to 9 wherein Y represents a methyl group, and m represents an integer of 0 or 1.

11. The compound or salt according to claim 1 which is  
15 3-(5-fluoro-3,3-dimethyl-3,4-dihydroisoquinolin-1-yl)quinoline,  
3-(5-chloro-3,3-dimethyl-3,4-dihydroisoquinolin-1-yl)quinoline,  
3-(5-bromo-3,3-dimethyl-3,4-dihydroisoquinolin-1-yl)quinoline,  
20 3-(5-ethynyl-3,3-dimethyl-3,4-dihydroisoquinolin-1-yl)quinoline,  
3-(5,6-difluoro-3,3-dimethyl-3,4-dihydroisoquinolin-1-yl)quinoline,  
25 3-(3-ethyl-5-fluoro-3-methyl-3,4-dihydroisoquinolin-1-yl)quinoline,  
3-(5-fluoro-3-methyl-3-propyl-3,4-dihydroisoquinolin-1-yl)quinoline,  
3-(3-methyl-3-trifluoromethyl-3,4-dihydroisoquinolin-1-yl)quinoline,  
30 3-[3-methyl-3-(2,2,2-trifluoroethyl)-3,4-dihydroisoquinolin-1-yl]quinoline,  
3-(3-methyl-3-phenyl-3,4-dihydroisoquinolin-1-yl)quinoline,  
3-[3-methyl-3-(4-fluorophenyl)-3,4-dihydroisoquinolin-1-yl]quinoline,  
35 3-[3-methyl-3-(4-chlorophenyl)-3,4-dihydroisoquinolin-1-

- yl)quinoline,  
3-(5-fluoro-3,3,4,4-tetramethyl-3,4-dihydroisoquinolin-1-yl)-6-fluoroquinoline,  
3-(5-fluoro-3,3,4,4-tetramethyl-3,4-dihydroisoquinolin-1-yl)-8-fluoroquinoline,  
5 3-(5-fluoro-3,3,4,4-tetramethyl-3,4-dihydroisoquinolin-1-yl)-8-methylquinoline,  
3-(4,5-difluoro-3,3-dimethyl-3,4-dihydroisoquinolin-1-yl)quinoline,  
10 3-(4,4-difluoro-3,3-dimethyl-3,4-dihydroisoquinolin-1-yl)quinoline,  
3-(4,4,5-trifluoro-3,3-dimethyl-3,4-dihydroisoquinolin-1-yl)quinoline,  
5-fluoro-3,3,4,4-tetramethyl-8b-quinolin-3-yl-4,8b-dihydro-3H-oxazileno[3,2-a]isoquinoline,  
15 3,3,4,4-tetramethyl-8b-quinolin-3-yl-4,8b-dihydro-3H-oxazileno[3,2-a]isoquinoline,  
5-fluoro-3,3-dimethyl-8b-quinolin-3-yl-4,8b-dihydro-3H-oxazileno[3,2-a]isoquinoline,  
20 6-fluoro-3,3,4,4-tetramethyl-8b-quinolin-3-yl-4,8b-dihydro-3H-oxazileno[3,2-a]isoquinoline,  
4',4'-dimethyl-8b'-quinolin-3-yl-4',8b'-dihydrospiro[cyclopentane-1,3'-oxazileno[3,2-a]isoquinoline],  
25 4,4,5-trifluoro-3,3-dimethyl-8b-quinolin-3-yl-4,8b-dihydro-3H-oxazileno[3,2-a]isoquinoline,  
3-(5-fluoro-3,3,4,4-tetramethyl-2-oxide-3,4-dihydroisoquinolin-1-yl)quinoline,  
3-(3,3,4,4-tetramethyl-2-oxide-3,4-dihydroisoquinolin-1-yl)quinoline,  
30 3-(6-fluoro-3,3,4,4-tetramethyl-2-oxide-3,4-dihydroisoquinolin-1-yl)quinoline,  
3-(6-chloro-3,3,4,4-tetramethyl-2-oxide-3,4-dihydroisoquinolin-1-yl)quinoline,  
35 3-(4,4-difluoro-3,3-dimethyl-2-oxide-3,4-dihydroisoquinolin-1-yl)quinoline,

3-(4,4,5-trifluoro-3,3-dimethyl-2-oxide-3,4-dihydroisoquinolin-1-yl)quinoline or  
3-(5-fluoro-3,3,4,4-tetramethyl-3,4-dihydroisoquinolin-1-yl)quinoline or salt thereof.

5

12. An agricultural chemical containing a compound or salt thereof according to any of claims 1 to 11 as an active ingredient.